



PROJECT: Willow Ave AP BORING: B
 ENGINEER: E. V. Howes LOGGED BY: J. Gillis
 JOB #: 1402008 DATE: 19 February 2014

PLASTICITY INDEX (PI)	LIQUID LIMIT	SAMPLE TYPE	(N) Blows Per foot	DEPTH (feet)	WATER LEVEL	DESCRIPTIVE LOG	GRAPHIC LOG	REMARKS
				1		TOPSOIL 0.0'-1.0' dark brown silty [ML] soil with fine rooting and no rock fragments. grades to residual soil at 1.0'		
				2		RESIDUAL SOIL 1.0'-5.5' reddish brown silty [ML] soil with increasingly frequent weathered sandstone fragments and somewhat moist. grades to bedrock at 5.5'		
				3				
				4				
		SPT	28	5		SANDSTONE [Ks] 5.5'-7.0' very hard, weathered and somewhat fractured fine to medium-grained sandstone with some rooting within fractures. dry and well indurated		Top of rock 5.5' SANDSTONE [Ks]
				6				
				7		End of Log		Ground water was not Encountered in boring
				8				
				9				
				10				
				11				
				12				
				13				
				14				
				15				
				16				
				17				
				18				
				19				
				20				

DRILLED BY: TransBay EQUIPMENT: Portable Hydraulic
 BORING SIZE: 3" SHEET: 1 of 1



PROJECT: Willow Ave AP	BORING: C
ENGINEER: E. V. Howes	LOGGED BY: J. Gillis
JOB #: 1402008	DATE: 19 February 2014

PLASTICITY INDEX (PI)	LIQUID LIMIT	SAMPLE TYPE	(N) Blows Per foot	DEPTH (feet)	WATER LEVEL	DESCRIPTIVE LOG	GRAPHIC LOG	REMARKS
				1		TOPSOIL 0.0'-1.5'		
				2		dark brown silty [ML] soil with fine rootling and no rock fragments. grades to residual soil at 1.5'		
				3		RESIDUAL SOIL 1.5'-5.0'		
				4		reddish brown silty [ML] soil with increasingly frequent weathered sandstone fragments and somewhat moist. grades to bedrock at 5.0'		
		SPT	45	5		SANDSTONE [Ks] 5.0'-7.0'		Top of rock 5.0'
				6		very hard, weathered and somewhat fractured fine to medium-grained sandstone with some rootling within fractures. dry and well indurated		SANDSTONE [Ks]
				7		End of Log		
				8				Ground water was not Encountered in boring
				9				
				10				
				11				
				12				
				13				
				14				
				15				
				16				
				17				
				18				
				19				
				20				

DRILLED BY: TransBay	EQUIPMENT: Portable Hydraulic
BORING SIZE: 3"	SHEET: 1 of 1

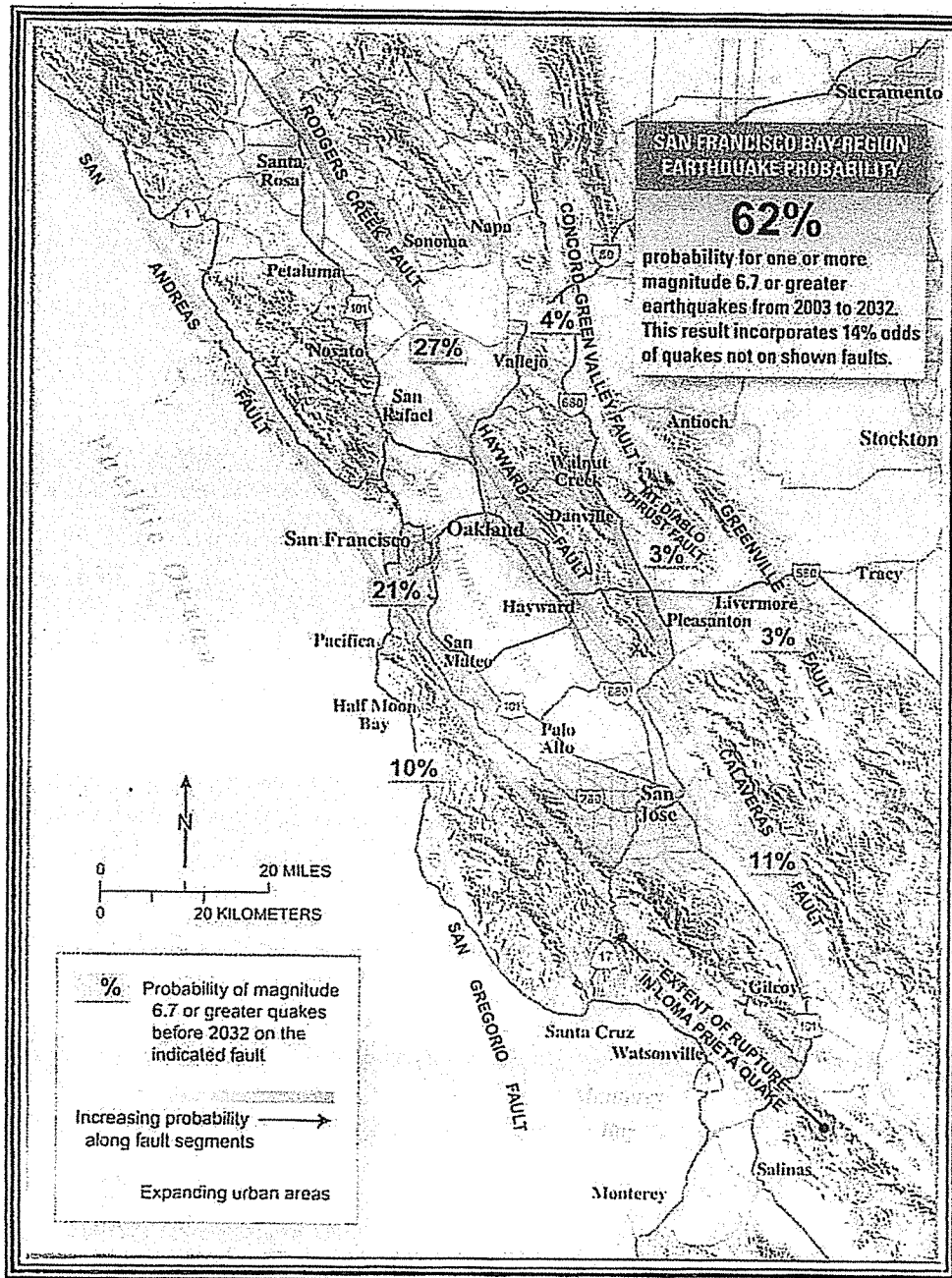
Notes to Boring Logs

- 1) Soil designations in this report conform to the Unified Soil Classifications per ASTM D22487, Classification of Soil for Engineering Purposes. Rock classifications conform to NAVFAC DM-7.
- 2) The SPT, Standard Penetration Test, is made using a standard 2" OD - 1.375" ID sampler driven by a 140# hammer falling 30" (per ASTM D-1586). A MPT, Modified penetration Test, is made using the same standard sampler driven by a 70# hammer falling 30". Other sampler and hammer size data for information only. TW indicates a Thin Wall sampler. The sample is driven 18" and the number of blows required to penetrate the last 12" is indicated on the log. "REF" (refusal) indicates the number of blows required to penetrate 6" exceeded 50.
- 3) Borehole and test pit data are considered representative of the subsurface condition only for the time and location at which the data were obtained. Interpretation or extrapolation of these data represent an exercise in judgment based on education and experience and is not warranted as precisely representing subsurface conditions at all locations. During construction variations will be observed in the field and field design changes should be expected.
- 4) PP indicates in situ measurements made by a standard pocket penetrometer in tons per square foot unconfined compressive strength.

TV indicates in situ measurements made by a Torvane in kilograms per square centimeter.
- 5) LL indicates the Liquid Limit of soils and
PI indicates the Plasticity Index of soils per ASTM D-4318
Q_{uc} indicates the unconfined compressive strength per
ASTM D-2166
TX/UU indicates an Unconsolidated Undrained Triaxial Test,
Confinement pressure/Ultimate strength in psf.
DD indicates dry density in pcf.
mc indicates moisture content in percent.
- 6) Qaf = artificial fill
Qc = colluvium
Ks = sandstone bedrock

^(*)Colluvium- Unconsolidated and unsorted soil material and weathered rock fragments which have accumulated on or at the base of slopes by natural gravitational or slope wash processes, derived by weathering and decomposition of the underlying bedrock material.

Residual Soil- Soil formed in place by the disintegration and decomposition of the rocks and the consequent weathering of the mineral materials. Presumably developed from the same kind of rock as that on which it lies.



Using newly collected data and evolving theories of earthquake occurrence, U.S. Geological Survey (USGS) and other scientists have concluded that there is a 62% probability of at least one magnitude 6.7 or greater quake, capable of causing widespread damage, striking somewhere in the San Francisco Bay region before 2032. A major quake can occur in any part of this densely populated region. Therefore, there is an ongoing need for all communities in the Bay region to continue preparing for the quakes that will strike in the future.

Plate 1, San Francisco Bay Region Earthquake Probabilities



Ross Valley Fire Department
777 San Anselmo Avenue, San Anselmo, CA 94960

TOWN OF FAIRFAX
Mark Mills
FIRE CHIEF

April 1, 2014

Address: 164 Willow, Fairfax
Applicant: G Family Construction
Application #: 14-0082

SEP 29 2014

RECEIVED

The Vegetation Management Plan submitted for review by the Ross Valley Fire Department is approved with the following conditions:

Defensible space shall be provided a minimum 100 feet from all structures

All vegetation within the 30 foot zone shall be irrigated.

Every effort shall be taken to ensure erosion control efforts are in compliance with standards established by Town regulations.

The approved plan is to last the life of the property. Any changes to the plan now or in the future will require Fire Department review. It is recommended that if the applicant has plans to landscape in the future that those plans be intermingled into this plan.

Vegetation shall be maintained to ensure address numbers are visible from both angles of approach.

Minimum standards shall be in place prior to final fire clearance.

If you have any questions about any of the items listed above please call me. I am available to meet with you on site to help you develop a plan. Please contact me to schedule (415) 258-4673 if you desire my assistance.

Sincerely,



Robert Bastianon

Fire Inspector

Committed to the protection of life, property, and environment.

SAN ANSELMO • FAIRFAX • ROSS • SLEEPY HOLLOW

HEADQUARTERS: 777 San Anselmo Avenue, San Anselmo, CA 94960 TEL: (415) 258-4686 FAX: (415) 258-4689 www.rossvalleyfire.org

EXHIBIT # F



**Tree-Report
Arboricultural Consultations
c/o Dan McKenna
P.O. Box 814
Forest Knolls, CA 94933
415 488-1621
415 602-1621 (cell)
dan@tree-report.com**

**164 Willow Avenue, Fairfax, CA
Vegetation Fuels Management Plan
&
Tree Protection Plan**

prepared for

**G-Design, LLC
1215 Lincoln Ave, Ste A
San Rafael, CA 94901**

by

Dan McKenna

Registered Consulting Arborist, ASCA RCA #445

Certified Arborist, ISA WE 0356A

February 6, 2014

PURPOSE

This Vegetation Fuels Management Plan has been developed in order to comply with the Ross Valley Fire Department Fire Protection Standard 220. The Tree Protection Plan has been developed to comply with Section 8.36.080 of the Fairfax Municipal Code.

These plans will include an inventory of existing woody perennials (trees) with a diameter > 4 inches as measured 4.5 feet above grade (dbh), their general condition, a scaled site plan locating and numbering each woody perennial, a delineated defensible space on the site plan, a general description of woody, herbaceous plants and grasses currently existing, a fuels hazard assessment matrix, a defensible space maintenance plan and a plan to protect trees during and post construction.

VEGETATION FUELS MANAGEMENT PLAN (VMP)

A VMP is developed by documenting the existing conditions, including topography, emergency vehicle access, exposure, the current species plant palette, and tree canopy spacing. These factors determine the size of defensible space that will developed and maintained in order to minimize the risk of wild land fires. Based upon these factors a reasonable defensible space can be created through selective tree removals and long-term vegetation maintenance strategies. In addition, the VMP will recommend crown thinning for trees on the adjacent property to the south in order to maximize the defensible space for this new residential structure.

Existing Conditions

The property is located on the north slope within the Town of Fairfax off Sir Francis Drake Blvd. Access is from a steep Town maintained paved road 20 feet in width. The subject property is located on a north to south shoulder ridge that rises from Sir Francis Drake Blvd, slopes up from the road and has an average grade exceeding 35 degrees. The lot faces, west/northwest. Prevailing summer winds from the west to northwest are partially mitigated by elevated ridgelines in the north and west.

The native vegetation type of the overall canyon hillside is primarily a live oak and mixed hardwood forest comprised of species such as Coast Live Oak – *Quercus agrifolia*, California Bay Laurel, *Unbellularia californica*, Black Oak – *Quercus kelloggii*, Pacific madrone – *Arbutus menziesii*, and Toyon – *Hetromeles arbutifolia*. The subject property however, has a relatively limited plant palette comprised of Coast Live Oak and Pacific Madrone. In addition, one large and highly pyrophytic invasive Blue Gum

Eucalyptus is growing at the top of the property (see site plan with tree inventory tagging for specific tree locations).

The subject property has a relatively scrubby understory, with sparse annual grasses just now sprouting, minimal Poison Oak – *Toxicodendron diversilobum*, and a moderate infestation of the pyrophytic species, Scotch broom – *Cytisus scoparius*. The subject property has a moderate amount of ground fuel in the form of dropped limbs and dead vegetation; the Oaks form a semi-broken contiguous canopy within the upper half of the lot. The lower half of the lot is dominated by one large senescent Live Oak that extends over the proposed new building's footprint.

Defensible Space

Utilizing the aforementioned topographic and vegetative conditions, the VMP Hazard Assessment Matrix determined a score of 14 (see Appendix A). This correlates to a defensible space of 30' x 30' x 30' x 50'. However, given the significant slope of the subject property >30% the recommended clearance is 50' x 50' x 50' x 100'. The majority of the recommended horizontal and downslope defensible space exceeds the property boundaries.

As previously mentioned, the property is up slope from the paved roadway. The current site plan calls for the new residence to be in set back from the roadway and coupled with the width of the roadway will provide an effective downslope defensible area of approximately 35 feet. Vegetation across from the subject property is not dense in the area immediately adjacent to the roadway, and with the defensible space requirements in place for those properties the effective defensible downslope space should be more than effective.

The horizontal defensible space requirements also extend beyond the property lines of the subject property. The northern (up canyon) property does not have any vegetation because the residence and paved driveway comprise all of the defensible space, however the southern (down canyon) property does have several trees which I would recommend have their crowns reduced in order to create space between their crowns and reduce the potential for a crown fire. The species palette for the down canyon property is comprised of Live Oaks and Douglas Firs *Pseudotsuga menziesii*.

Defensible Space Treatment Recommendations

There are 14 Live Oaks currently within the Defensible Space Zone within 164 Willow Ave. Seven of those trees are within or immediately adjacent to the new structure's foot print or supporting foundation and must be removed. Three of the remaining trees are recommended for removal because of poor structure, SOD, or lack of vigor. The balance of the trees (4) crowns' are all growing up slope of the structure and once pruned will provide at least 20 feet of clearance from the structure. This pruning will also provide at least 10 feet of clearance between the tree crowns. Appendix B provides specific recommendations for each of these trees.

Since the Defensible Space is relatively free of understory brush or grasses, either a landscape plan should be developed and constructed, or the area should be mulched to minimize annual grass growth and pyrophytic woody perennial growth. In general, the area should be kept clear of any pyrophytic species as listed in Appendix C.

Fire Apparatus Clear Zone (FACZ)

As previously stated, Willow Rd. is approximately 20 feet in width. The building is set back an additional 15 feet with a paved driveway. The combined paved driveway and road area should provide an adequate FACZ. Currently, vegetation growing on both sides of the roadway provides more than 15 feet of vertical clearance.

Landscaping and Maintenance

With the exception of the Live Oaks, the defensible space has been recently stripped of most vegetation. The area can be mulched or planted with fire resistant species and I have included a list of appropriate species compiled by the University of California Cooperative Extension (See Appendix C). I would recommend that the project landscape architect limit their plant palette to these species. If required, I can provide assistance when developing a plant palette for any new landscaping in this area that meets the guidelines set forth in the Ross Valley Fire Department Fire Protection Standard 220.

The balance of the property beyond the defensible space can be improved relative to fire safety and forest management. All trees with a dbh >4" have been tagged, given a general condition description, and a recommended course of maintenance up to and including removal (See Appendix B). These recommendations take into account best practices for wild land forest management and the new use for the property, namely residential. All pruning should be conducted under the supervision of a Certified Arborist utilizing ANSI A300 Pruning Standards.

- Besides the specific tree recommendations the following general specifications should also be undertaken initially and on an annual basis:
- Thin out overly dense stands to provide crown separation. The ideal is to provide 10 feet of clearance between tree crowns. This is an ideal, and may not always be practical.
- Remove or substantially thin undergrowth. Currently, only a minor infestation of Scotch Broom was observed and should be immediately removed. Seeds of this species remain active in the soil for over 7 years and therefore constant removal will be required as they continue to germinate. Advantageous invasive species such as Scotch Broom, Silver Acacia, Himalayan Blackberry, Vinca, English Ivy or other aggressive species will continue try to colonize the area. These and other undesirable species should be removed before they become a nuisance and fire hazard.
- Cut and maintain annual grasses to within 4 inches of grade during the dry season. A good rule of thumb is May through October.
- As practical, raise tree crowns to a minimum of 8.0 feet above grade, in some cases this may not be practical given low growing large scaffold oak structures.
- When thinning out undergrowth remove pyrophytic species and only plant fire resistant plants.
- As needed, prior to the start of the dry season (usually May), remove dead and diseased trees or branches and foliage.
- Remove any species listed as pyrophytic in Appendix C.
- Clean up downed and dead debris. Chip materials up to 6" and remove larger material.
- Currently 1 tree listed in Appendix B is infected with Sudden Oak Death (SOD) and this tree should be removed utilizing the best practices listed in the UC website:

<http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74151.html#MANAGEMENT>

- Best practices for Oak Forest management can be found in the following website:

http://www.californiaoaks.org/html/oak_tree_care.html

TREE PROTECTION PLAN (TPP)

A TPP is utilized prior to and during construction in order to protect trees from the impacts of construction. Generally, a Tree Protection Zone (TPZ) is created around trees that prohibit or at least limit construction activities within the tree's sensitive rooting area. The TPZ is delineated utilizing construction fencing at least 4 feet in height and stoutly fastened to the ground in order to be maintained for the duration of the construction.

The size of the TPZ is calculated by the species of tree and its ability to withstand construction impacts, the tree's dbh, and the type of construction activity. Obviously, the most impactful type of construction are excavations around the tree's root system or general disturbance/compaction to the soil in the tree's root zone.

The tree in question (Coast Live Oak) are relatively intolerant of root disturbance and the TPZ should be equal to 1 linear foot for every 1 inch of trunk dbh. So for example, a tree with a 6 inch dbh would have a TPZ of 6 feet in all directions or roughly a 12 foot diameter TPZ. In cases, where construction must take place within a TPZ, specific practices are specified to minimize impacts.

Appendix B will list the size of the TPZ for the tree that is impacted by construction. Fortunately, only Tree #6 will need a constructed TPZ. However, I am recommending that construction fencing be erected from the north property line to the south property line between Tree #6 and Tree #7 in order to limit access by construction crews into the up slope forest areas and eliminate the use of the area for materials/equipment storage.

A TPP should also include pre and post construction tasks in order to ensure the viability and vitality of the trees. The following practices should be employed in sequence for Tree #6:

1. Tree #6 should have all deadwood removed and a horizontal crown reduction of approximately 10%
2. Once the TPZ is defined, install 6 inches of organic mulch to the area, keeping the mulch 6 inches from the tree trunk
3. Install the perimeter construction fencing. The fencing should be installed to a height of 4 feet, secured with 1 inch metal posts or equivalent, driven at least 18 inches into the ground, and immediately reestablished if the condition of the fence becomes deteriorated or unstable.
4. If construction needs to be conducted within the TPZ consult the project Arborist for instructions prior to commencing.
5. Install construction fencing cross slope between the northern and southern property lines, as practical between trees #6 and #7
6. Prohibit any construction activities east of the construction fencing installed in Specification #7
7. Once all construction is completed, the fencing may be removed.
8. Remove any damaged or dead branches on Tree #6 utilizing ANSI A300 Pruning Standards
9. Landscape Improvements to the areas immediately adjacent to the TPZ for Tree #6 should strive to not change soil moisture within their respective TPZ. Oak trees do not like to have supplemental irrigation once established.

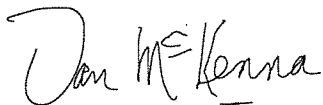
The area not affected by construction is dominated by Coast Live Oaks of varying age, size and health. As part of sound forestry, I would recommend the removal of dead, diseased and structurally compromised trees to improve the overall health and vitality of this property. In addition, Pacific Madrones with severe leans are also growing in this area of the property and they should also be removed. Finally, a large Blue Gum Eucalyptus is growing on the southern property line close to the top of the property. This invasive and highly pyrophytic species should be removed for safety related to use of the property and to improve solar access for the more desirable oaks.

Implementing the recommendations beyond the impact of construction and Defensible Space should be done for two reasons:

- The first is related to the increased use of the property by the new residents. Removing hazardous or diseased trees will lessen the potential for injury due to failing limbs.
- The second issue concerns improved forest health through increased light, and air distribution. Through careful and selective thinning the remaining trees should benefit.

It should be noted that recommendations for trees not listed in the defensible space are not necessitated by the construction of the proposed residence and the recommendations are made to improve the vitality of the native forest landscape and increase fire safety for this and adjoining properties. I want to clearly state, these recommendations beyond the Defensible Zone are not related to construction and Fairfax approval for tree removals should be independent from construction approval.

Respectfully submitted,



Dan McKenna,
ASCA RCA #445, ISA WE0356A

Appendix A
Hazard Assessment Matrix

Hazard Points	1	2	3	4	5	6	7	8	Points
Aspect	NE, E	NW, N	SE, W	S	SW				2
Slope		0-10		11-20		21-30		31+	8
Fuel	Specimen	Hardwood	Grass	Mostly	Mostly	Pyrophoric	Conifer	Conifer	2
0-30	Garden			Grass	Brush	Hardwoods		w/brush	
						Chaparral		under	
								story	
Fuel	Grass,	Mostly		Pyrophoric	Conifer				2
31-100	Mostly	Brush			with brush				
	Grass			Hardwoods	under story				
				Chaparral					

Total Points

14

Appendix B
Tree Inventory
Condition Summary, TPZ & Recommendations

Tree #	Species- dbh	Within Defensible Space	Condition	Recommendations/TPZ
1	Quercus agrifolia 8"	Yes	Young tree, good vigor, upright structure, impacted by retaining wall footing	Remove
2	Quercus agrifolia 2"	Yes	2" dbh, good vigor, within bldg. footprint	Remove
3	Quercus agrifolia 5"	Yes	Poor Vigor, within bldg. footprint	Remove
4	Quercus agrifolia 12"	Yes	Fair vigor, suppressed by #5, within bldg. footprint	Remove
5	Quercus agrifolia 30"	Yes	Poor Vigor, Structure compromised, within bldg. footprint	Remove
6	Quercus agrifolia 20"	Yes	Good vigor	Deadwood, Reduce horizontal crown spread by 10%, 20' TPZ prior to construction
7	Quercus agrifolia 9"	Yes	Sod Infected	Remove
8	Quercus agrifolia 8"	No	Poor Vigor, compromised structure, Increased crown separation for Tree #10	Remove
9	Quercus agrifolia 8"	No	Poor Vigor, Increased crown separation for Tree #10	Remove

Tree #	Species	Within Defensible Space	Condition	Recommendations/TPZ
10	Quercus agrifolia 18"	Yes	Good vigor	Deadwood, 10% horizontal crown reduction
11	Quercus agrifolia 10"	Yes	Poor Vigor, Increased crown separation for Tree #10	Remove
12	Quercus agrifolia 8"	No	Poor Vigor, Increased crown separation for Tree #10	Remove
13	Quercus agrifolia 15"	No	Good Vigor	Deadwood
14	Quercus agrifolia 10"	No	Poor Vigor, Increased crown separation for Tree #13	Remove
15	Quercus agrifolia 12"	No	Good Vigor	Deadwood
16	Quercus agrifolia 10"	No	Good Vigor	Deadwood
17	Quercus agrifolia 14"	No	Poor Vigor	Remove
18	Quercus agrifolia 14"	No	Good Vigor	Remove scaffold branch on east side suppressing #19
19	Quercus agrifolia 40"	No	Good Vigor	Deadwood, Remove low scaffold branches on East side
20	Eucalyptus globulus 54"	No	Good Vigor, broken, scaffold branches, poor attachments	Remove invasive pyrophytic species
21	Quercus agrifolia 8"		Good Vigor	Deadwood, remove lower branches to 6'

Tree #	Species	Within Defensible Space	Condition	Recommendations/TPZ
22	Quercus agrifolia 38"	Yes	Good Vigor, significant decay in large scaffold branches, long laterals scaffold branches within target zone of new residence, root system within construction zone and soil disturbance will impact tree health (see attached photos)	Remove
23	Quercus agrifolia 6"	Yes	Good Vigor	Deadwood
24	Quercus agrifolia 12"	No	Good Vigor	Deadwood
25	Quercus agrifolia 11"	No	Poor Vigor	Remove to increase canopy spread for #26
26	Quercus agrifolia 9"	No	Good Vigor	Deadwood
27	Quercus agrifolia 12"	No	Poor Vigor	Remove to increase canopy spread for #26
28	Quercus agrifolia 48"	No	Good Vigor	Deadwood, Remove 1 lower scaffold branch on the east side to improve crown separation
29	Arbutus menziesii 8"	No	Poor Vigor	Remove
30	Arbutus menziesii 7"	No	Good Vigor, 45 degree lean	Remove to improve crown separation for Tree #28

Tree #	Species	Within Defensible Space	Condition	Recommendations/TPZ
31	Arbutus menziesii 6"	No	Fair Vigor, severe 70 degree lean	Remove
32	Arbutus menziesii 6"	No	Fair Vigor, severe 80 degree lean	Remove
33	Arbutus menziesii 7"	No	Fair Vigor, severe 80 degree lean	Remove
34	Quercus agrifolia 16"	No	Good Vigor	Deadwood
35	Quercus agrifolia 36"	No	Poor vigor, decay in trunk	Remove to improve crown separation for Tree #28
36	Quercus agrifolia 12"	No	Good to fair vigor	Remove to improve crown separation for Tree #24
37	Quercus agrifolia 8"	Yes	Good Vigor	Deadwood, 10% crown thinning
38	Quercus agrifolia 18"	Yes	Good Vigor, 45 degree lean towards street, within construction zone, root zone will be impacted	Remove

Appendix C

UC Cooperative Extension

Pyrophytic vs Fire Resistant Plant Lists

PYROPHYTIC SPECIES: High Fire Hazard Native Shrubs			
Latin name	Common Name	Latin name	Common Name
<i>Adenostoma fasciculatum</i>	Chamise, Greasewood	<i>Erigonum fasciculatum</i>	California Buckwheat
<i>Arctostaphylos spp.</i>	Manzanitas (some twiggy) ^b	<i>Pickeringia montana</i>	Chaparral Pea
<i>Artemisia californica</i>	Sagebrush (California)	<i>Quercus spp.</i>	Scrub Oak (brushy oaks) ^b
<i>Baccharis spp.</i>	Coyote Brush ^{ab}	<i>Salvia mellifera</i>	Black Sage
<i>Castanopsis chrysophylla</i>	Chinquapin, Giant	<i>Vaccinium</i>	Huckleberry ^b
High Fire Hazard Native Trees:			
<i>Cupressus sargentii</i>	Sargent Cypress	<i>Pinus radiata</i>	Monterey Pine ^b
<i>Lithocarpus densiflora</i>	Tan Oak, Tanbark Oak	<i>Pseudotsuga menziesii</i>	Douglas Fir ^b
<i>Pinus coulteri</i>	Coulter Pine	<i>Umbellularia californica</i>	California Bay ^b
<i>Pinus attenuata</i>	Knobcone Pine		
High Fire Hazard Ecological Weeds:			
<i>Acacia spp.</i>	Acacia species ^b	<i>Eucalyptus spp.</i>	Eucalyptus ^b
<i>Cortaderia jubata</i>	Jubata Grass ^b	<i>Pennisetum</i>	Fountain Grass
<i>C. Selloana</i>	Pampas Grass ^b	<i>Spartium junceum</i>	Spanish Broomb
<i>Cytisus scoparius</i>	Scotch Broom ^b	<i>Ulex europea</i>	Gorse ^b
<i>Cytisus monspessulanus</i>	French Broom ^b		
Fire Hazardous Introduced (Exotic) Plants:			
<i>Abies spp.</i>	Firs	<i>Picea spp.</i>	Spruces
<i>Bambusa spp.</i>	Bamboo ^b	<i>Pinus spp.</i>	Pines
<i>Cedrus spp.</i>	Cedars	<i>Rosmarinus officinalis</i>	Rosemary
<i>Chamaecyparis spp.</i>	False Cypress	<i>Spartium junceum</i>	Spanish Broom
<i>Juniperus spp.</i>	Junipers	<i>Taxus spp.</i>	Yew
<i>Larix spp.</i>	Larch	<i>Thuja spp.</i>	Arborvitae
<i>Lonicera japonica</i>	Japanese Honeysuckle	<i>Tsuga spp.</i>	Hemlock
<i>Palms</i>	Palm (if dry fronds)	<i>Ulex europea</i>	Gorse
<i>Pennisetum spp.</i>	Fountain Grass		

^a Good for erosion control; ^b Invasive Species

Succulents (These are among the most fire-resistant plants.)			
Latin name	Common name	Latin name	Common name
<i>Aeonium spp.</i>	Aeonium	<i>D. pulverulenta</i>	Dudleya
<i>Agave spp.</i>	Agave	<i>Lampranthus spp.</i>	Bush Ice Plant
<i>Aloe spp.</i>	Aloe	<i>Echeveria spp.</i>	Hen and Chicks
<i>Carpobrotus spp.</i>	Ice Plant ^b	<i>Malephora crocea</i>	Croceum Ice Plant ^b
<i>Cotyledon spp.</i>		<i>Malephora luteola</i>	Yellow Trailing Ice Plant ^b
<i>Crassula spp.</i>	Crassula ^b	<i>Portulacaria afra</i> "Variegata"	Elephant's Food
<i>Delosperma "Alba"</i>	White Trailing Iceplant	<i>Sedum confusum</i>	Stonecrop
<i>Drosanthemum floribunda</i>	Rosea Ice Plant ^b	<i>Sedum rubrotinctum</i>	Brown Bean (Pork and Beans)
<i>D. hispidium</i>	Rosea Ice Plant ^b	<i>Senecio serpens</i>	
<i>Dudleya farinosa</i>	Dudleya or Cliff Lettuce		
Groundcovers:			
<i>Achillea tomentosa</i>	Woolly Yarrow	<i>Festuca rubra</i>	Creeping Red Fescue ^b
<i>Ajuga reptans</i>	Carpet Bugle	<i>Fragaria californica</i>	Wood Strawberry
<i>Armeria maritima</i>	Common Thrift	<i>Fragaria chiloensis</i>	Beach Strawberry
<i>Arctotheca calendula</i>	Silver Spreader	<i>Gazania rigens leucolaena</i>	Trailing Gazania
<i>Cerastium tomentosum</i>	Snow-in-Summer	<i>Iberis sempervirens</i>	Evergreen Candytuft
<i>Coprosma kirkii</i>	Creeping Coprosma	<i>Liriope gigantea</i>	Giant Turf Lily
<i>Duchesnea indica</i>	Mock Strawberry	<i>Myoporum parvifolium</i>	Myoporum
<i>Eounymus Fortunei coloratus</i>	Winter Creeper	<i>Osteospermum fruticosum</i>	Trailing African Daisy

^a Good for erosion control; ^b Invasive Species

Groundcovers (Continued):			
Latin name	Common name	Latin name	Common name
<i>Pelargonium peltatum</i>	Ivy Geranium	<i>Santolina virens</i>	Green Lavender Cotton
<i>Phyla nodiflora</i>	Lippia Repens	<i>Thymus praecox arcticus</i>	Creeping Thyme
<i>Potentilla tabernaemontanii</i>	Spring Cinquefoil	<i>Trifolium fragiferum</i>	O'Connor's Legume
<i>Pyracantha "Santa Cruz"</i>	Firethorn	<i>Verbena peruviana</i>	Perennial Verbena
<i>Santolina chamaecyparissus</i>	Lavender Cotton	<i>Vinca spp.</i>	Periwinkle ^a
Perennials:			
<i>Achillea spp.</i>	Yarrow	<i>Iris spp.</i>	Iris
<i>Agapanthus spp.</i>	Lily-of-the-Nile	<i>Kniphofia uvaria</i>	Red Hot Poker (Torch Lily) ^a
<i>Bergenia spp.</i>	Bergenia	<i>Lantana montevidensis</i>	Lantana
<i>Centaurea cineraria</i>	Dusty Miller	<i>Lavandula spp.</i>	Lavender
<i>Centranthus ruber</i>	Red Valerian (Jupiter's beard)	<i>Limonium perzil</i>	Sea Lavender
<i>Coreopsis spp.</i>	Coreopsis	<i>Mimulus spp.</i>	Monkey Flower
<i>Dietes bicolor</i>	African Iris	<i>Oenothera berlandieri</i>	Mexican Evening Primrose
<i>Dietes vegeta</i>	Fortnight Lily	<i>Penstemon spp.</i>	Beard Tongue
<i>Erigeron karvinskianus</i>	Fleabane (Mexican Daisy)	<i>Sisyrinchium spp.</i>	Blue-Eyed Grasses ^a
<i>Erysimum linifolium</i>	Wallflower	<i>Stachys byzantina</i>	Lamb's Ears
<i>Geranium spp.</i>	Geranium	<i>Strelitzia reginae</i>	Bird of Paradise
<i>Helichrysum petiolatum</i>	Curry Plant	<i>Tulbaghia violacea</i>	Society Garlic
<i>Hemerocallis hybrids</i>	Daylily	<i>Zantedeschia aethiopica</i>	Common Calla ^b
<i>Hesperaloe parviflora</i>	Red Yucca	<i>Zauschneria californica</i>	California Fuchsia
<i>Heuchera maxima</i>	Island Alum Root		
Vines:			
<i>Rosa Banksiae</i>	Lady Banks' Rose	<i>Trachelospermum jasminoides</i>	Star Jasmine
<i>Solanum jasminoides</i>	Potato Vine	<i>Wisteria spp.</i>	Wisteria
<i>Tecomaria capensis</i>	Cape Honeysuckle		

^a Good for erosion control; ^b Invasive Species

Moderate Fire Retarding Plants:			
Latin name	Common name	Latin name	Common name
<i>Ajuga crispa</i>	Giant Ajuga	<i>Hypericum calycinum</i>	St. Johnswort ^b
<i>Aloe aristata</i>	Dwarf Aloe	<i>Phyla nodiflora</i>	Lippia
<i>Aloe brevifolia</i>	Shortleaf Aloe	<i>Myoporum parvifolium</i>	Myoporum
<i>Atriplex semibaccata</i>	Australian Saltbush	<i>Osteospermum fruticosum</i>	African Daisy
<i>Cerastium tomentosum</i>	Snow-in-Summer	<i>Teucrium chamaedrys</i>	Prostrate Germander
<i>Coprosma kirkii</i>	Creeping Coprosma	<i>Trifolium fragiferum</i> var <i>O'Connor's</i>	Legume (Strawberry clover)
<i>Gazania rigens leucolaena</i>	Trailing Gazania		
Low Fuel Volume Native Plants:			
<i>Arctostaphylos hookeri</i>	Monterey Carpet (Manzanita) ^a	<i>Ceanothus maritimus</i>	Maritime Ceanothus
<i>Arctostaphylos uva-ursi</i>	Bearberry ^a	<i>Cistus crispus</i>	Rockrose
<i>Ceanothus gloriosus</i>	Point Reyes Ceanothus ^a	<i>Cistus salvifolius</i>	Sageleaf Rockrose
<i>Ceanothus griseus</i> 'Anchor Bay'		<i>Digitalis</i> spp.	Foxglove
<i>Ceanothus griseus</i> 'horizontalis'	Carmel Creeper ^a	<i>Grindelia stricta venulosa</i>	Coastal Wild Gum
<i>Ceanothus griseus</i> 'Emily Brown'		<i>Salvia sonomensis</i>	Creeping Sage ^a
<i>Ceanothus griseus</i> 'Ray Hartman'		<i>Symphoricarpos mollis</i>	Creeping Snowberry
Low Fuel Volume Native Perennials:			
<i>Achillea millefolium</i>	Yarrow	<i>Eriogonum</i> spp.	Wild Buckwheat
<i>Aquilegia formosa</i>	Western Columbine	<i>Eriophyllum confertiflorum</i>	Golden Yarrow
<i>Asarum caudatum</i>	Wild Ginger	<i>Eriophyllum stachaedifolium</i> var. <i>artemisaeifolium</i>	Lizardtail
<i>Aster chilensis</i>	Wild Aster	<i>Erysimum capitatum</i>	Foothill Wallflower
<i>Brodiaea laxa</i>	Grass Nut	<i>Erysimum concinnum</i>	Fragrant Wallflower
<i>Dicentra formosa</i>	Western Bleeding Heart	<i>Eschscholzia</i> spp.	California Poppy
<i>Epipactis gigantea</i>	Stream Orchid	<i>Grindelia stricta</i>	Coastal Wild Gum
<i>Erigeron glaucus</i>	Beach Aster	<i>Heuchera micrantha</i>	Coral Bells

^a Good for erosion control; ^b Invasive Species

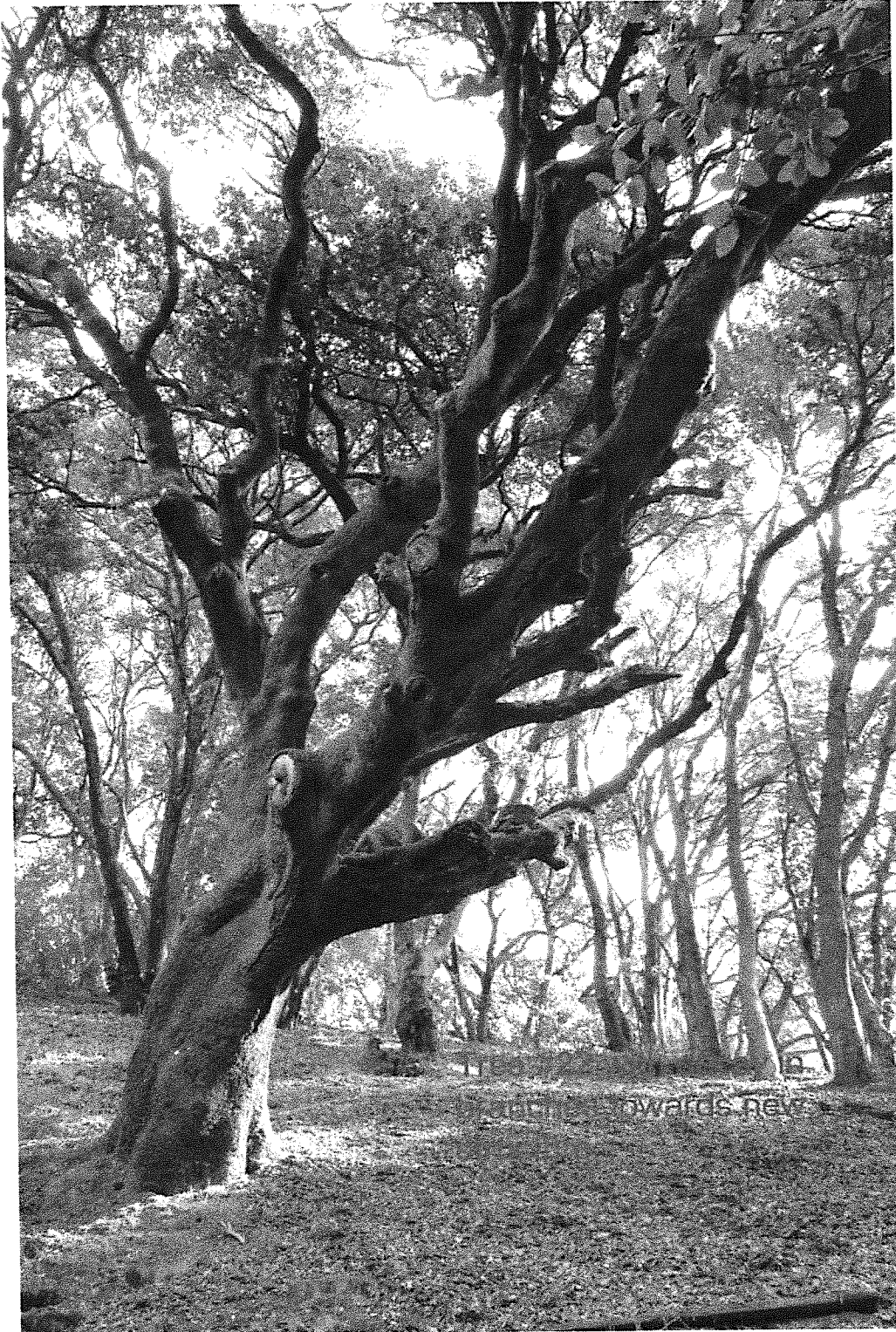
Shrubs:			
Latin name	Common name	Latin name	Common name
<i>Brugmansia spp.</i>	Angel's Trumpet	<i>Mahonia repens</i>	Creeping Mahonia
<i>Buddlein spp.</i>	Butterfly Bush	<i>Nerium oleander</i>	Oleander
<i>Carpantria californica</i>	Bush Anemone	<i>Nolina spp.</i>	Nolina (related to Yucca)
<i>Coleonema caka</i> "Diosma"	Brush of Heaven	<i>Pittosporum crassifolium</i>	Dwarf Karo
<i>Convolvus cneorum</i>	Bush Morning Glory	<i>Pittosporum tobira</i>	Mock Orange
<i>Cotoneaster congestus</i>	Likiano ^a	<i>Prunus lyonii</i>	Catalina Cherry
<i>Cotoneaster horizontalis</i>	Rock Cotoneaster ^{ab}	<i>Punica granatum</i>	Pomegranate
<i>Cotoneaster microphyllus</i>	Rockspray Cotoneaster ^a	<i>Rhapiolepis spp.</i>	India Hawthorn
<i>Cotoneaster dammeri</i>	Bearberry Cotoneaster ^{ab}	<i>Rhamnus alaternus</i>	Italian Buckthorn
<i>Echium spp.</i>	Echium or Priderot	<i>Rhododendron (Azalea) spp.</i>	Rhododendrons and Azaleas
<i>Escallonia spp.</i>	Escallonia	<i>Rhus integrifolia</i>	Lemonade Berry
<i>Lavatera assurgentiflora</i>	Malva Rose (Tree Mallow)	<i>Simmondsia chinensis</i>	Jojoba
<i>Ligustrum japonicum</i>	Japanease Privet	<i>Trachelospermum jasminoides</i>	Star Jasmine
<i>Ligustrum lucidum</i>	Glossy Privet	<i>Yucca spp.</i>	Yucca
<i>Ligustrum texanum</i>	Texas Privet		
Trees:			
<i>Acer spp.</i>	Maple	<i>Macadamia hybrids</i>	Macadamia Nut
<i>Arbutus unedo</i>	Strawberry Tree	<i>Metrosideros excelsus</i>	New Zealand Christmas Tree
<i>Ceratonia siliqua</i>	Carob	<i>Myoporum spp.</i>	Myporum
<i>Cercis occidentalis</i>	Western Redbud	<i>Pistacia chinensis</i>	Chinese Pistache
<i>Cercocarpus betuloides</i>	Mountain Ironwood	<i>Pittosporum spp.</i>	Mock Orange
<i>Citrus spp.</i>	Citrus	<i>Quercus spp.</i>	Oak ^a
<i>Fagus spp.</i>	Beech	<i>Rhus lancea</i>	African Sumac
<i>Feijoa sellowiana</i>	Pineapple Guava	<i>Robinia pseudoacacia</i>	Locust, Black
<i>Fraxinus spp.</i>	Ash	<i>Schinus molle</i>	California Pepper Tree ^a
<i>Gleditsia triacanthos</i>	Honey Locust	<i>Schinus terebinthifolius</i>	Brazilian Pepper ^a

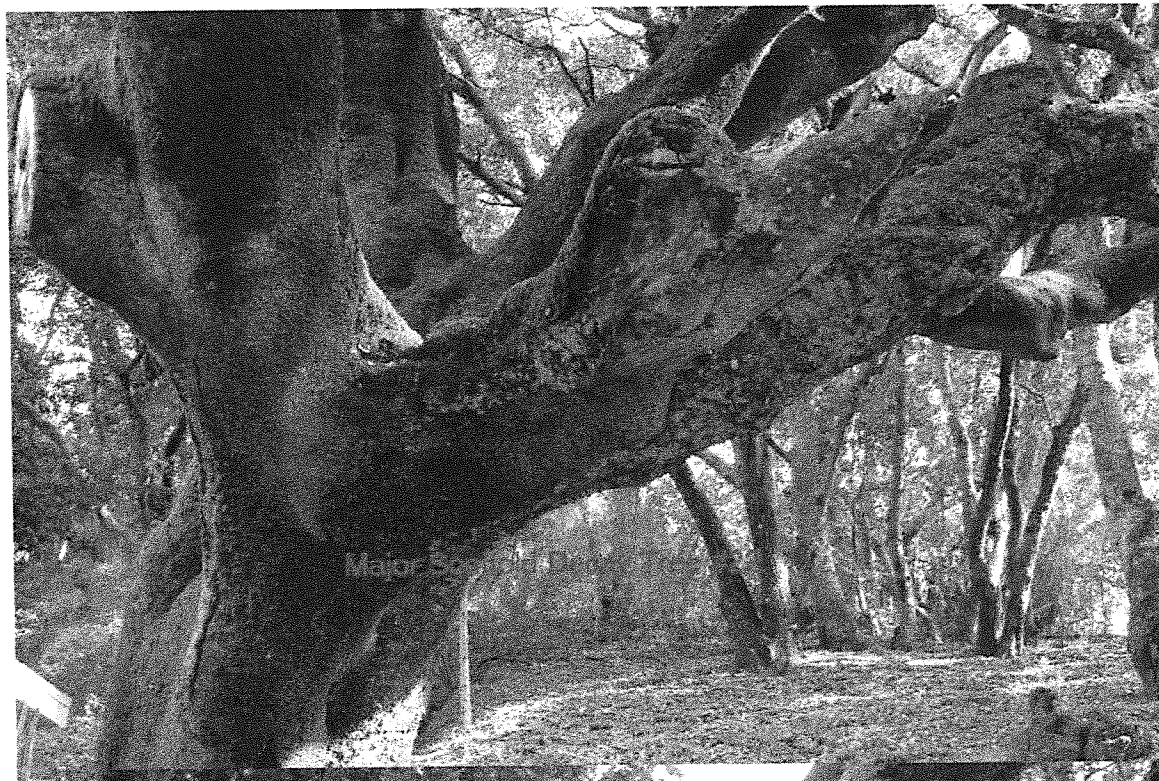
^a Good for erosion control; ^b Invasive Species

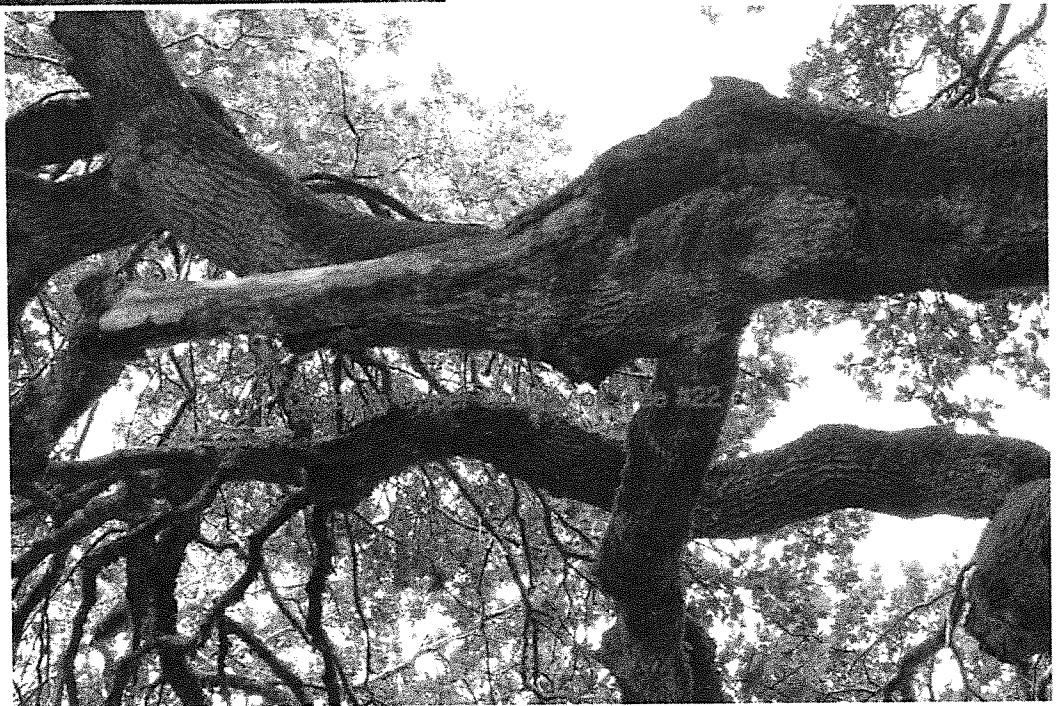
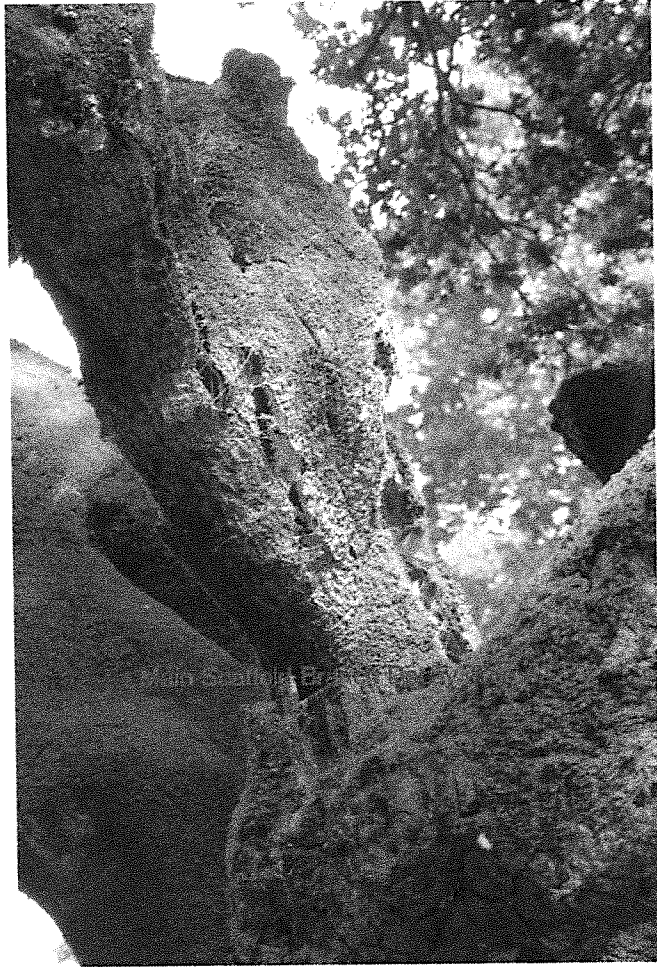
Low Fuel Volume Native Perennials (Continued):			
Latin name	Common name	Latin name	Common name
<i>Iris douglasiana</i>	Douglas Iris	<i>Pteridium aquilinum</i>	Bracken Fern ^b
<i>Iris longipetala</i>	Long-petaled Iris	<i>Ranunculus californica</i>	Buttercup
<i>Iris macrosiphon</i>	Ground Iris	<i>Romneya coulteri</i>	Matilija Poppy
<i>Lonicera hispidula</i>	Pink Honeysuckle	<i>Satureja douglasii</i>	Yerba Buena
<i>Lupinus spp.</i>	Lupine ^a	<i>Sidalcea malvaeflora</i>	Checkerbloom
<i>Mimulus spp.</i>	Monkey Flower	<i>Sisyrinchium bellum</i>	Blue-eyed Grass ^a
<i>Monardella vellosa</i>	Coyote Mint	<i>Sisyrinchium californicum</i>	Yellow-eyed Grass
<i>Penstemon spp.</i>	Beard Tongue	<i>Solanum xanti</i>	Purple Nightshade
<i>Polystichum munitum</i>	Sword Fern	<i>Zigadenus fremontii</i>	Star Lily
NATIVE WILDLAND PLANTS — Valued Native Watershed Species			
Trees:			
<i>Acer macrophyllum</i>	Big Leaf Maple	<i>Fraxinus oregona</i>	Oregon Ash
<i>Aesculus californica</i>	Buckeye	<i>Juglans hindsii</i>	California Black Walnut
<i>Alnus rhombifolia</i>	White Alder ^a	<i>Platanus racemosa</i>	Western Sycamore
<i>A. rubra</i>	Red Alder	<i>Populus fremontii</i>	Fremont's Poplar
<i>Cercocarpus betuloides</i>	Mtn. Mahogany	<i>Quercus spp.</i>	Oaks ^a
<i>Cornus nuttalli</i>	Pacific Dogwood	<i>Salix spp.</i>	Willow
<i>Corylus cornuta</i>	Hazel	<i>Sequoia sempervirens</i>	Coast Redwood
Shrubs:			
<i>Ceanothus (some) spp.</i>	(Some) Wild Lilac ^a	<i>Penstemon corymbosus</i>	Thymeleaf Penstemon, Redwood Penstemon
<i>Dendromecon rigida</i>	Bush Poppy	<i>Penstemon breviflorus</i>	Bush Beardstongue, Gaping Penstemon
<i>Eriodictyon californicum</i>	Yerba Santa	<i>Solanum umbelliferum</i>	Nightshade, Blue Witch
<i>Galtheria spp.</i>	Salal	<i>Rhamnus spp.</i>	Buckthorn
<i>Garrya spp.</i>	Silk Tassel ^a	<i>Rhus spp.</i>	Sumac
<i>Heteromeles arbutifolia</i>	Toyon, Christmas Berry ^a	<i>Ribes sanguineum</i>	Red Flowered Currant
<i>Mimulus aurantiacus</i>	Sticky Monkey Flower		

^a Good for erosion control; ^b Invasive Species

Photographs of Tree #22





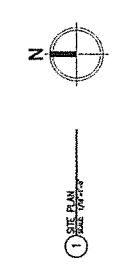
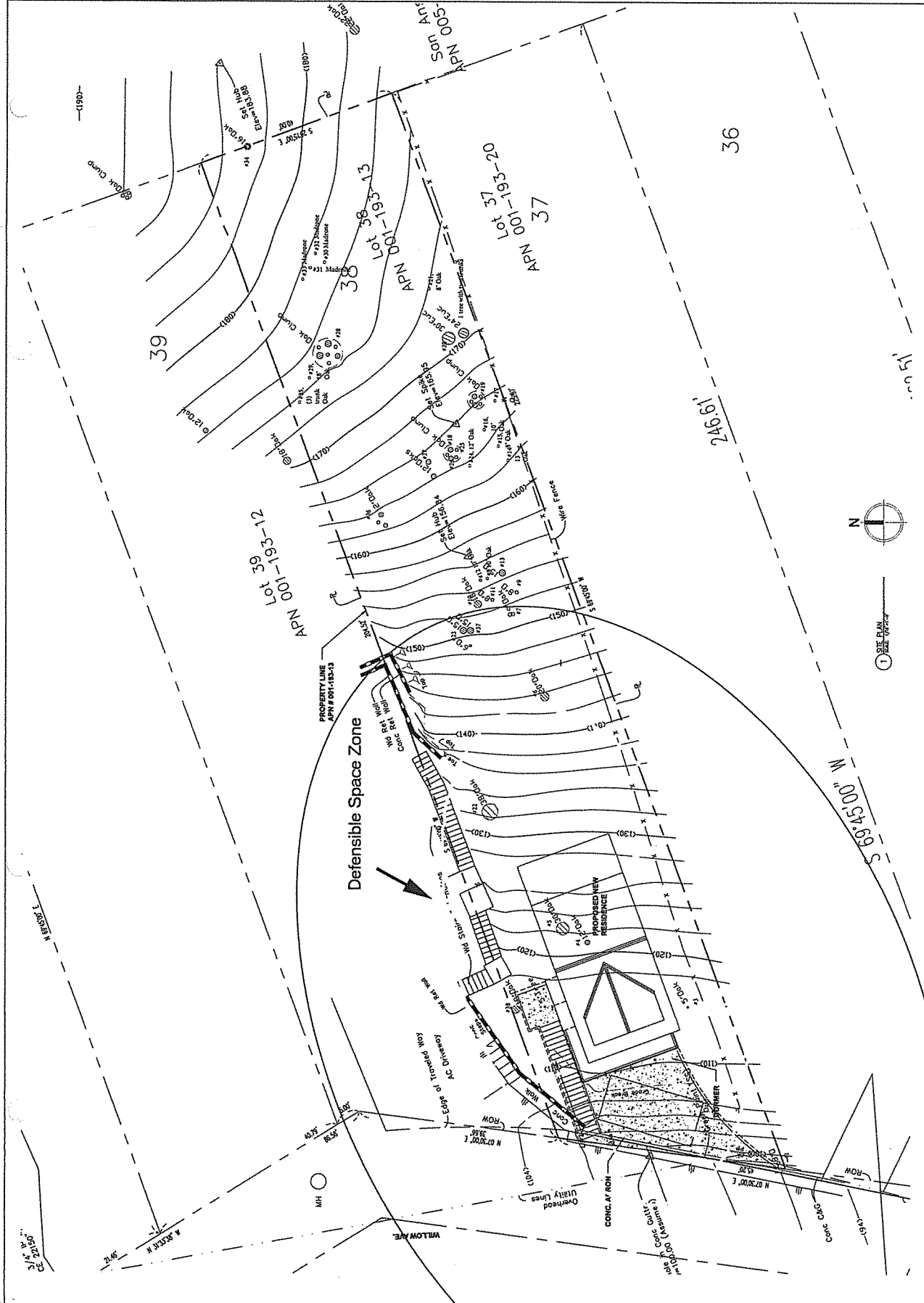




PROJECT NUMBER:		
NO.	DATE	DESCRIPTION

PROJECT: DRAWN BY: DAWD G.
PROJECT TITLE:
NEW RESIDENTIAL HOME FOR THE ZEIGER RESIDENCE
 164 WILLOW AVENUE, FAIRFAX CA 94535
 APN 001-193-13

SHEET NUMBER:
A.2.2



January 8, 2015

TOWN OF FAIRFAX

JAN 08 2015

RECEIVED

To: Fairfax Planning Commission

From: Elizabeth and Victor Harris,
160 Willow Avenue
Fairfax, CA. 94930

Objections to Proposed House at 164 Willow Avenue

As the homeowners since 1981 of 160 Willow Avenue, we have strong concerns about the proposed 1,192 square foot house at 164 Willow Ave. -- the lot directly upslope from our home.

The applicant is requesting discretionary permits and variances simply because the proposed house is too large for the steep, slender 40-foot-wide lot on which it is to be built.

Accordingly, the proposed house needs to be modified significantly for the reasons stated below.

Request for a Hill Area Residential Development Permit and Excavation Permit

In the Fairfax Planning Department's own words in its report, "The project site is substandard in size and width based on the slope, the proposed house will require the excavation of over 100 cubic yards of material and the site is located in a landslide hazard zone."

A logical question to start with: Why is the proposed house not scaled to a size that the parcel -- created in 1907 with no doubt a summer cabin in mind -- can actually accommodate safely?

Request for a Wall Height Variance

The applicant proposes 11-foot-tall driveway retaining walls that are nearly twice the 6-foot limit set by the town code. And even 11 feet is the bare "**minimum** height necessary to construct a driveway with a grade and grade breaks that can be negotiated by a standard vehicle without bottoming out," according to the planning report. That alone raises questions about how safe these walls actually are.

Though Linda Neal in the Planning Department advised that the retaining walls would not stand above the hill, the report nonetheless points out that "these tall walls will have a visual impact on the street scape [sic] of Willow Avenue" and that "some type" of mitigation measures are required, without any specifics being stated.

EXHIBIT # 6

If you actually view the site and the markers, it is obvious that the huge retaining walls result in an eyesore to anyone living near or passing by.

Again, is this site being overbuilt?

Request for Side Setback Variance

The applicant is required to have a combined 20 foot side setback according to town code. The report indicates that the proposed house is 10 feet from upslope property line and 8 feet from our property line.

The real picture is even worse, because the markers and story poles that have gone up place the proposed house within 4 to 4-1/2 feet of our property line, not eight feet. Also, the proposed house falls within approximately 15 feet of two of our large oak trees whose roots can spread seven times the width of their crown, thus destabilizing them and possibly causing them to fall on our home.

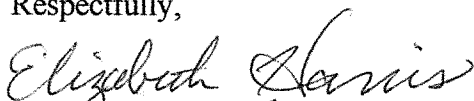
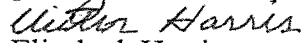
The planning report implies that since variances were given for 120 and 176 Willow Avenue, variances should be granted for 164 Willow as well. A variance is an **exception** and should not set a precedent. And to be candid, anyone who views the home at 176 Willow Avenue would have to concede that it is oversized relative to the lot and that it does change the character of the immediate Willow Avenue neighborhood, which consists of residences that are spaced out from one another, with landscaping that typically includes large trees and shrubs.

Given these facts, our request for a 10 foot side setback from our property is completely reasonable.

As Fairfax residents for more than 33 years, we respectfully maintain that you do your part in maintaining the town's charming, rustic quality and not grant permits and variances that conflict with town codes and therefore erode the character of the town. Fairfax does not need more houses crammed into too-small lots, and we should not be the direct victims of it.

For the forgoing reasons, among others, the Fairfax Planning Commission should not approve these permits and variances.

Respectfully,



Elizabeth Harris
Victor Harris